

## **Remarks**

As stated above, Applicants appreciate the Examiner's thorough examination of the subject application and request reexamination and reconsideration of the subject application in view of the preceding amendments and the following remarks.

As of the 20 February 2008 Office action, claims 1-30 were pending in the subject application, of which claims 1, 11, 18, and 20 are independent claims. With this response, Applicants have amended claims 1, 2, and 20; and canceled claims 18-19 and 21-22. Applicants do not believe the amendments to claims 1, 2, and 20 have added new matter to the claim set. By amending claims 1, 2, and 20, Applicants have re-arranged and re-organized claim elements that already existed in the claim set. Accordingly, Applicants do not believe any new matter has been added to the claim set through the amendments of claims 1, 2, and 20.

### **A. Response to Claim Objections**

The Examiner has advised that if claims 1-6 are found allowable, then claims 11-17 may be objected to as duplicate claims. Applicants acknowledge the Examiner's advisory and will take appropriate action should the situation arise.

The Examiner has advised that if claim 2 is found allowable, claim 18 will be objected to as a duplicate claim. Applicants have cancelled claim 18, removing it from consideration.

The Examiner has advised that if claim 21 is found allowable, claim 22 will be objected to as a duplicate claim. Applicants have cancelled claims 21-22, removing them from consideration.

B. Response to 35 U.S.C. § 103 Rejections

The Examiner has rejected claims 1-30 under 35 U.S.C. § 103 over U.S. Publication No. 2002/0194379 ("Bennett") in view of U.S. Patent No. 6,275,812 ("Haq"). Amended claim 1 recites:

1. (Currently Amended) A computer-implemented method for defining one or more roles for a project, the method comprising:

extracting one or more key words from unstructured text;  
comparing the one or more key words with a skills taxonomy;

generating a skills list based on the comparison between a the skills taxonomy and the one or more key words;

comparing at least a portion of the skills list to one or more predefined roles; and

generating one or more role templates based on the comparison of the at least a portion of the skills list and the one or more predefined roles, wherein each role template includes one or more skills associated with the one or more predefined roles. (Emphasis added).

11. (Original) A computer-implemented method for defining one or more roles for a project, the method comprising:

comparing a skills taxonomy with key words from unstructured text associated with the project to generate a skills list; and

comparing at least a portion of the generated skills list with one or more predefined roles to generate one or more role templates for the project, wherein each role template includes one or more skills associated with fulfilling a role. (Emphasis added)

20. (Currently Amended) A project role generator system, comprising:

a skills taxonomy;

an archive of at least one predefined project role;

a search engine retrieving unstructured text from one or more sets of unstructured data and extracting key words from the unstructured text associated with a project; and

a role generator generating one or more role templates for the project based on the key words, predefined roles, and the skills taxonomy, wherein each role template includes one or more skills associated with fulfilling a role;

wherein the role generator is configured to:

compare the key words to the skills taxonomy;  
generate a skills list for a project based on the comparison between the key words and the skills taxonomy; and  
compare at least a portion of the skills list to one or more predefined roles; and  
generate the one or more role templates based on the comparison of the at least a portion of the generated skills list and the one or more predefined roles.

Amended claim 1 contains an element that “generat[es] a skills list . . .” and another that “generat[es] one or more role templates[.]” Amended Claim 1. Each of the independent claims of the subject application contain these elements. See Subject Application claims 1, 11, and 20. For the sake of convenience, Applicants’ analysis will focus on claim 1. However, it is understood that the analysis is also applicable to independent claims 11 and 20 which also recite the features of generating a skills list and generating role templates.

The subject application’s specification supports the emphasized claim elements in various paragraphs. For example:

[0035] In one implementation, a computer-implemented method for dynamic role generation may include generating a list of skills relating to a project based on a comparison between a stored skills taxonomy and key words extracted from unstructured text associated with the project. The method also may include generating one or more role templates for the project based on a comparison of the generated list of skills and one or more predetermined project roles. Intelligent text mining on multiple sets of unstructured data related to a project may be used to extract key words from the data. The key words then are compared against a skills taxonomy. The skills taxonomy can include a qualifications catalog or an archived skills list. A match between the key words and the skills taxonomy yields a list of skills required for the project. The list of skills then is compared against other skills lists for past projects to define one or more role templates. An advantage of this technique is to reduce the tedious work of grouping skills together to define individual roles. Another potential advantage is that this technique may be used to provide a detailed proposal for roles to staff a project.

[0040] The role generator 302 compares the key words with a skills taxonomy 310. The skills taxonomy 310 is a classification of predefined skills. The skills can be classified according to any number of classification systems, such as by department, by job description, etc., and may be provided as a skills catalogue in a database. The key words may be mapped to one or more skills included in the skills taxonomy 310 to create a skills list representing skills that are likely to be available within the enterprise based on the key words. The skills list may be provided as structured data that can be used toward generating a role. The role generator 302 may rank each skill in the list of skills according to the skill's relevance to the project. In one example, the role generator 302 assigns a value to each skill. The role generator 302 can include a filtering function to filter out skills from the skills list that rank below a predetermined threshold, i.e. have a value under a predetermined minimum relevance value.

[0041] The role generator 302 then compares the skills list with one or more predefined roles 312 that may be used as templates to build the new role templates 314. The predefined roles 312 can be archived roles that had been defined for past projects. The predefined roles 312 can, for example, be stored in accordance with any storage or archival arrangement, or on any type of media accessible by the role generator 302. Each predefined role 312 includes a number of skills required for that role. Each role template 314 that are generated based on the predefined roles 312 also include a number of skills required for a suggested role, which defines an information access that can be attributed to the generated role. Thus, in accordance to the example above, if the project requires a portal designer, a role template 314 can be generated for an individual having the requisite portal design skill, as well as other skills necessary or desired for fulfilling the role. The individual then will have access to information that is specialized to the role.

Subject Application Paragraphs [0035], [0040], and [0041] (emphasis added).

Applicants contend that Bennett and Haq do not, individually or in combination, disclose or suggest “generating a skills list” and / or “generating role templates.” For example, Bennett is understood to generally disclose a system that extracts data from structured or unstructured text and provide a summary of the extracted data. Bennett’s system can 1) determine whether an item has data that can be extracted, 2) tokenize and extract data from an item, and 3) summarize

the item and/or the extracted data. See Bennett paragraphs [0069], [0072], and [0079]. Bennett contemplates the creation of “templates” based on extracted data.

[0056] Server 150 uses these services when controller 230 processes messages. In accordance with the present invention, extraction service 240a generally determines the type of information reflected by text of a source (e.g., email message, web page, etc.) and generates a template containing data extracted from the unstructured text. Further according to the present invention, controller 230 sends the completed template, alone or with the source itself to a client. The controller 230 may, using the API of an application resident in the client, integrate data in the completed template with data already stored by the client. As suggested above, controller 230 may send a message to the client prompting a user associated with the client for an instruction as to whether to integrate the data in the completed template with data already stored by the client. A data handling component, like component 225 of client 100, may process this prompting message by causing client 100 to display the message on a display screen and enter a wait state for the user to select a key on an input device signaling the data handling component to invoke a process designated by the API for the appropriate client application.

Bennett paragraph [0056] (emphasis added). However, Bennett’s template appears to be a template based on the *type or source* of information rather than the content of the extracted data. For example, Bennett appears to create an email template when data is extracted from an email source and a web page template when data is extracted from a web page source. Bennett does not, however, appear to “generate a role template” based on the content of the extracted data. Similarly, Bennett does not appear to “generate a skill list” based on extracted data. In contrast, the subject application sets forth and claims a system that “generates a skills list” and “generates role templates” that are ultimately based on the content of extracted data—on key words extracted from unstructured text. See Amended Claim 1. Bennett can extract and organize data, but does not create more than a data template—an organization of data based on a particular type

of data source, or a format or structure of text. See Bennett Paragraphs [0071]-[0077]. The invention recited in claims 1, 11, and 20, on the other hand, generate one or more role templates based upon keywords from unstructured text (e.g., on data extracted from documents or communications). See e.g., claims 1, 11, 12 and Subject Application paragraphs [0040]-[0041]. Accordingly, Applicants contend that Bennett does not disclose or suggest the elements claimed in independent claims 1, 11, and 20.

Similarly, it does not appear that Haq discloses the generation of role templates. The Haq reference is understood to disclose a human resources support system that uses skills templates to help users manage careers, jobs, and employees within an organization. For example, Haq discloses:

*A system or method for human resource skill management, training, career development, and deployment, linking specialties, job functions, skill sets, and experience/training profiles. The method uses skill templates, an innovation that allows for systematic evaluation of employee skills.* A weighting system is used to establish the relative significance of various skills. Skills are sub-classified as per technology. Assessment of employee suitability for a project is based on quantitative evaluation and not on a subjective consideration. Various new skills assessment metrics have been introduced.

Haq Abstract (emphasis added). However, Haq is not understood to disclose or even suggest the *generation* of the roles or role templates. Haq's system does not appear to contemplate how the skills templates and / or role definitions are created; it appears that the Haq system uses pre-defined or pre-existing roles and does not *generate* roles or role templates. In contrast, independent claims 1, 11, and 20 generally recite a system that may *generate* roles templates ultimately based upon key words from unstructured text (e.g., of documents, communications,

text, etc.), associated with a project. For example, a system consistent with the claimed invention may:

generat[e] one or more roles for a project or any other undertaking within an organization. In one aspect, a computer-implemented method for defining one or more roles for a project involves generating a skills list for a project based on a comparison between a skills taxonomy and key words from unstructured text associated with the project. Then, one or more role templates for the project are generated based on a comparison of at least a portion of the generated skills list and one or more predefined roles. Each role template may include one or more skills associated with fulfilling a role.

Subject Application Paragraph [0008] (emphasis added).

As discussed above, Bennett is understood to disclose a system that can extract text from sources and create “templates,” but Bennett’s templates appear to be based on a data source (such as an email), not data content. Bennett does not appear to include any mechanism for identifying key words associated with a project, with skills, or with roles. Haq is understood to disclose a system that uses skills templates to help manage employees, careers, etc. However, neither system appears to disclose or contemplate the *generation* of role templates or the *generation* of a skills list. Indeed, even if one skilled in the art were to combine Bennett and Haq, the claimed invention, generally including the *generation* of role templates and skills lists, associated with a project would not be achieved, as neither Bennett, nor Haq, nor the combination of the two teaches or suggest *generation* of a skills list or a role template.

Independent claims 1, 11, and 20 recite generating role templates and skills lists. Applicants contend that Bennett and Haq do not, individually or in combination, disclose or contemplate these elements. As such the combination of Bennett and Haq is insufficient to

render independent claims 1, 11, and 20 obvious under 35 U.S.C § 103(a). In light of the amendments and the analysis presented above, Applicants respectfully request withdrawal of the § 103 rejection of claims 1, 11, and 20. Additionally, Applicants respectfully request the withdrawal of the § 103 rejections of dependent claims 2-10, 12-17, and 23-30 which are dependent upon claims 1, 11, and 20 respectively.

C. Conclusion

In light of the amendments and discussion above, Applicants respectfully assert that the subject application is in condition for allowance. The Examiner is invited to telephone Applicants' attorney (@ 617-305-2143) to facilitate prosecution of this application.

While no additional fees are believed necessitated by this response, in the event that additional fees are payable, please charge our Deposit Account No. 50-2324 as necessary.

Respectfully Submitted,

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